DEPARTMENT of ENVIRONMENTAL SERVICES Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: DODGE POND, BIG	Lake Area (ha):	5.02
Town: HAMPTON FALLS	Maximum depth (m):	1.7
County: Rockingham	Mean depth (m):	0.8
River Basin: Coastal	Volume (m³):	40000
Latitude: 42°54'34" N	Relative depth:	0.7
Longitude: 70°52'02" W	Shore configuration:	1.16
Elevation (ft): 18	Areal water load (m/yr):	166.2
Shore length (m): 920	Flushing rate (yr ⁻¹):	207.5
Watershed area (ha): 1730.0	P retention coeff.:	0.12
<pre>% watershed ponded: 0.2</pre>	Lake type: artif	ficial

BIOLOGICAL:	22 February 1996	22 August 1995
DOM. PHYTOPLANKTON (% TOTAL) #	1 NO PHYTOPLANKTON	NO PHYTOPLANKTON
#	2 SAMPLES COLLECTED	SAMPLES COLLECTED
#	3	
PHYTOPLANKTON ABUNDANCE (units/mL)	
CHLOROPHYLL-A (µg/L)		6.73
DOM. ZOOPLANKTON (% TOTAL) #	1 NO ZOOPLANKTON	NO ZOOPLANKTON
#	2 SAMPLES COLLECTED	SAMPLES COLLECTED
#	3	
ROTIFERS/LITER		
MICROCRUSTACEA/LITER		
ZOOPLANKTON ABUNDANCE (#/L)		
VASCULAR PLANT ABUNDANCE		Very abundant
SECCHI DISK TRANSPARENCY (m)		1.7 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)	17.0	6.3
BACTERIA (E. coli, #/100 ml) #	1	18
#	2	1
*	3	

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None Hypolimnion volume (m^3) : None Anoxic volume (m^3) : None

HEMICAL: Lake: DODGE POND, BIG Town: HAMPTON FALLS					
	22 February 1996 22 August 1995			995	
DEPTH (m)	1.5		0.2		
pH (units)	6.5		7.6		
A.N.C. (Alkalinity)	7.9		42.1		
NITRATE NITROGEN	0.33		< 0.10		
TOTAL KJELDAHL NITROGEN	0.50		0.52		
TOTAL PHOSPHORUS	0.039		0.028		
CONDUCTIVITY (µmhos/cm)	226.1		306.0		
APPARENT COLOR (cpu)	60		100		
MAGNESIUM			5.38		
CALCIUM			19.2		
SODIUM			37.9	1	
POTASSIUM			1.65		
CHLORIDE	57		63		
SULFATE			15		
TN : TP	21		19		
CALCITE SATURATION INDEX			0.8		

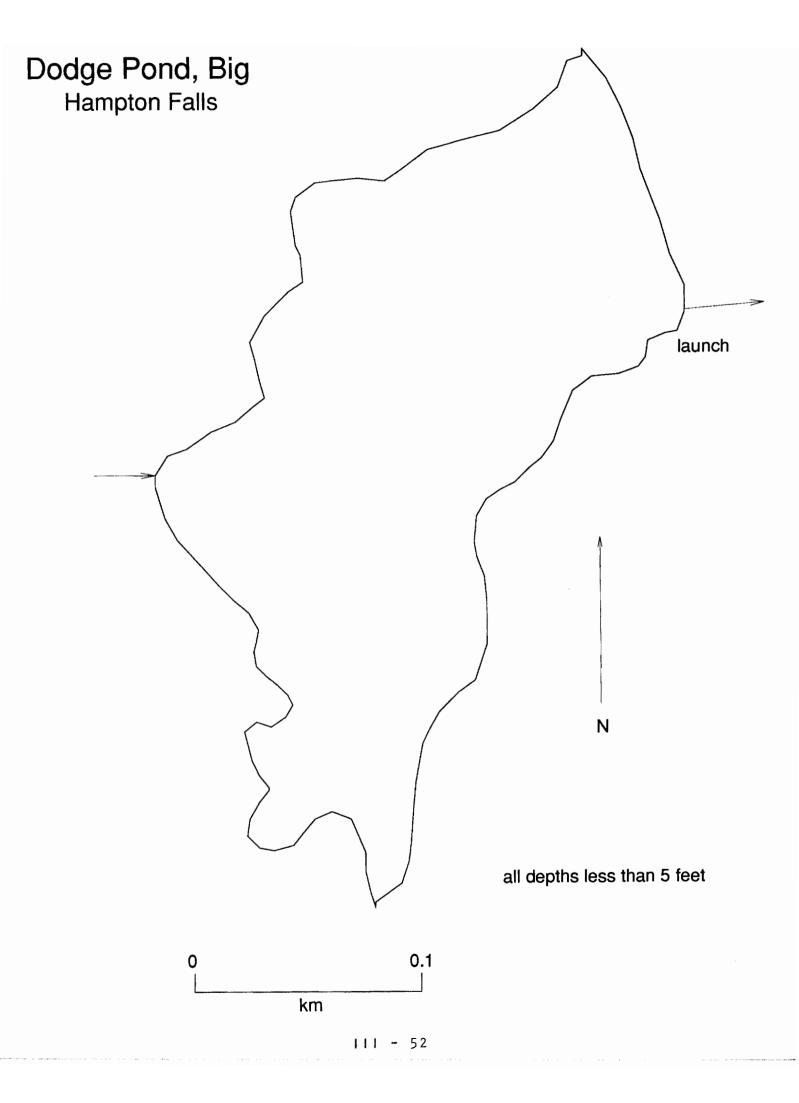
All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1995

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	3	6	1	10	Eutro.

COMMENTS:

- 1. This is a manmade impoundment on the Hampton Falls River at Route 1; it flows into the Hampton Falls tidal basin.
- 2. The pond is locally called Janvrin Pond; it is also known as Whittier Pond.
- 3. Elevated ANC, conductivity, chloride, sulfate and cation values are probably due to ocean influence (sea spray, flooding).
- 4. A steep dirt boat access was present on the south side of the pond opposite Dick's Tire Center.



FIELD DATA SHEET

LAKE: DODGE POND, BIG TOWN: HAMPTON FALLS DATE: 08/22/95 WEATHER: CLEAR, FEW CLOUDS, WINDY

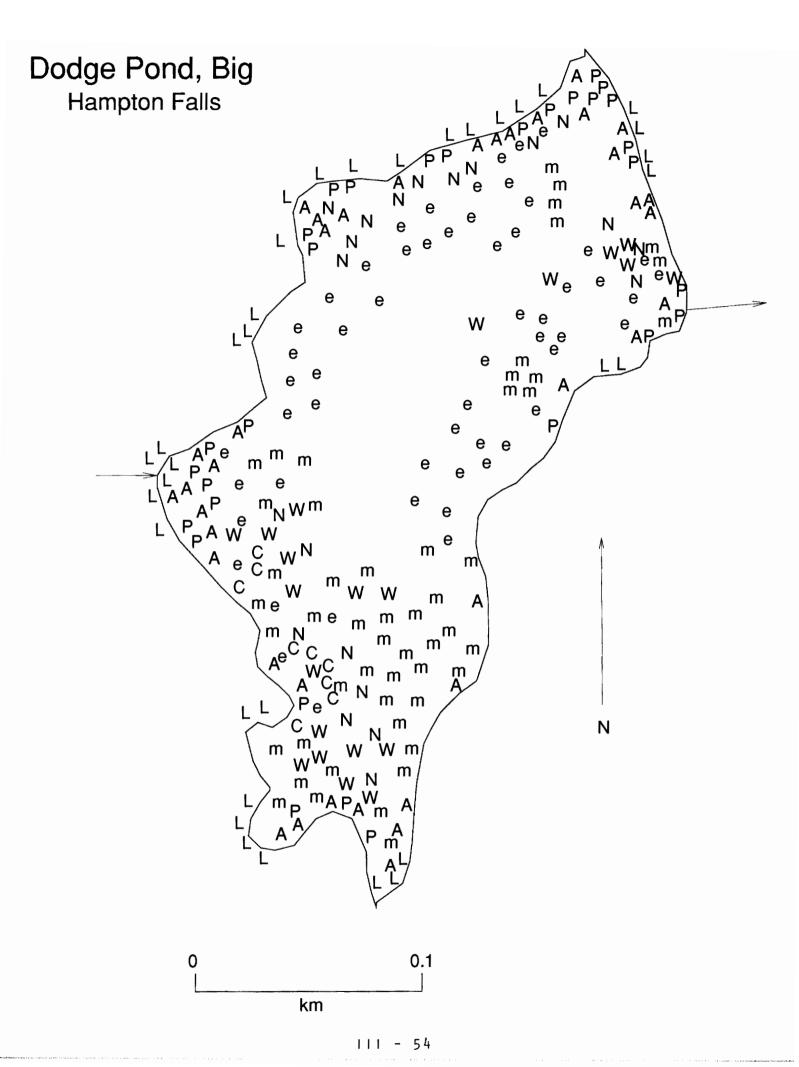
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SECCHI DISK (m): 1.7 VOB COMMENTS:

BOTTOM DEPTH (m): 1.7

TIME: 1045

*Dissolved oxygen values are in mg/L



AQUATIC PLANT SURVEY

LAK	E: DODGE POND, BIG	TOWN: HAMPTON FALLS	DATE: 08/22/95	
Key	PLANT	NAME	ABUNDANCE	
Rey	GENERIC	COMMON		
m	Wolffia	Watermeal	Very abundant	
P	Pontederia cordata	Pickerelweed	Scattered	
A	Sagittaria	Arrowhead	Sparse	
е	Elodea nuttallii	Waterweed	Very abundant	
W	Potamogeton	Pondweed	Sparse	
N	Nymphaea	White water lily	Scattered	
L	Lythrum salicaria	Purple loosestrife	Common	
С	Ceratophyllum demersum	Coontail	Scattered	
		OVERNIT ARTHURANCE		

OVERALL ABUNDANCE: Very abundant

GENERAL OBSERVATIONS:

- 1. A very weedy pond, suitable for canoes or very small motors only.
- 2. Plankton samples were not collected because of interference from the macrophytes.